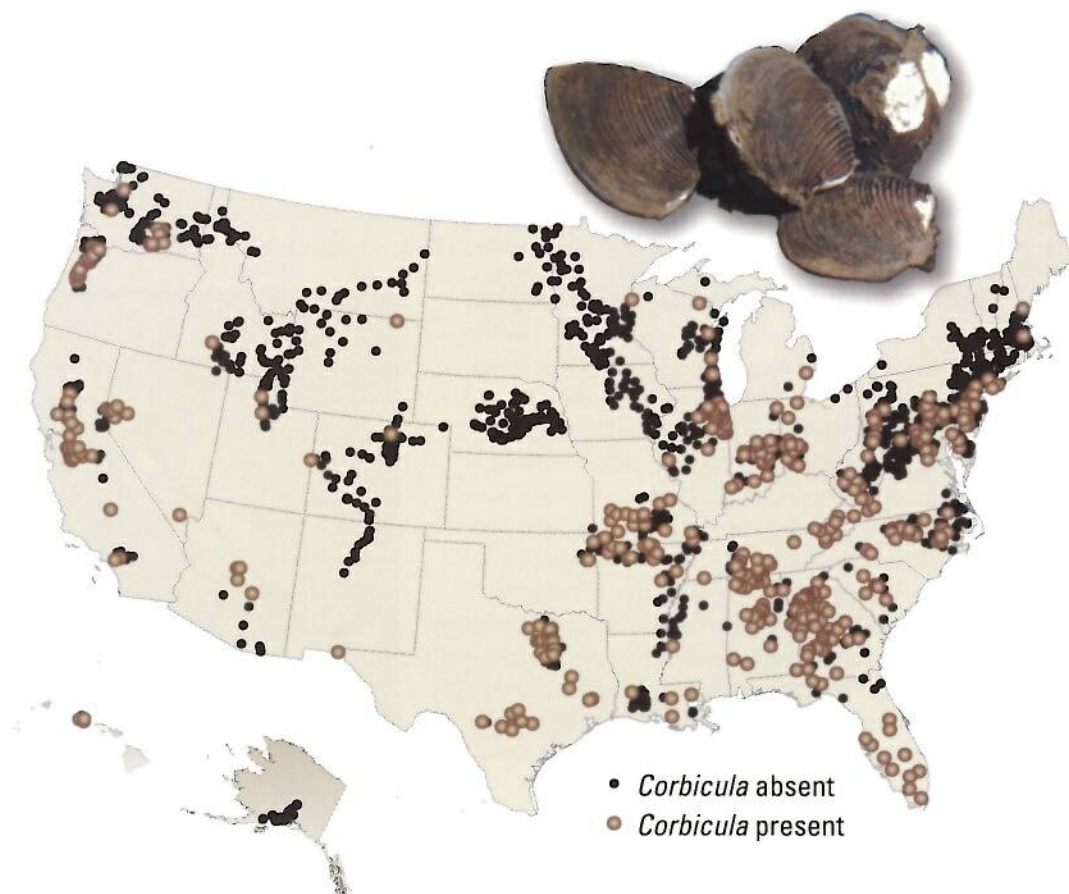


*The Asian clam (*Corbicula fluminea*) was the most frequently observed introduced macroinvertebrate species.*

### Introduced Macroinvertebrate Species—Occurrence and Relations to Biological Condition

The Asian clam (*Corbicula fluminea*), encountered at 25 percent of NAWQA sampling sites, was the most frequently observed introduced macroinvertebrate species. The Asian clam was likely intentionally introduced in the Columbia River, Washington, in about 1938 as a source of food, but subsequently spread throughout most of the United States (Fuller and others, 1999). When present in large numbers, the Asian clam can foul powerplant water-intake pipes, industrial and municipal water systems, and irrigation canals.

Another rapidly spreading introduced macroinvertebrate species is the New Zealand mud snail (*Potamopyrgus antipodarum*). Native to New Zealand, the mud snail has spread widely in Australia, Europe, and North America through inadvertent introductions (Benson, 2006). At high population densities, colonies of the tiny mud snail disrupt the base of the food chain by consuming algae in the stream and competing with native bottom-dwelling macroinvertebrate species. The rapid reproduction rate of this snail has led to it accumulating quickly in new environments, where it can reach densities above a half million per square yard (Benson, 2006). A case study illustrating the ecological effects of mud snails is presented on the facing page.



Map of the United States showing the distribution of the Asian clam (*Corbicula fluminea*). Asian clams were found by U.S. Geological Survey scientists at 25 percent of sampling sites and were the most frequently observed introduced macroinvertebrate species. (Alaska and Hawai'i not shown to scale.)